

EV6000

LED UV Lamp

The EV6000 LED UV lamp is a portable, hand-held UV lamp for fluorescent non-destructive testing applications like fluorescent penetrant testing and fluorescent magnetic particle inspections. This UV lamp utilizes the latest LED technology from Magnaflux, building on 5 years of LED UV lamp designs and over 85 years of non-destructive testing experience.



UV-A radiation is generated by special high-performance LEDs and focused through custom-designed optics to provide the maximum irradiated area available from any hand-held lamp on the market. The EV6000 features a uniform beam with no hot-spots, with a 23cm (9 in) wide beam, 33% wider than the next widest hand-held UV lamp in the industry. Custom-designed optics provide intense and even coverage of UV-A for clearly visible indications, and an integrated filter ensures minimal visible light emission.

Durability is enhanced with advanced cooling that needs no fan, and a lens that does not solarize. The EV6000 boasts low energy consumption, is environmentally sound, and certified to NDT standards for LED UV lamps and certified for Aerospace Prime and OEM specifications for emission spectrum and beam profile.

Each unit is shipped with a manufacturer's certificate of conformance which meets or exceeds all current specifications for use with fluorescent liquid penetrant and magnetic particle testing.

FEATURES

- 23cm wide, uniform beam
- No hot-spots in the beam profile
- Rugged, durable design
- No internal fan
- Low energy consumption
- Aerospace prime and OEM certified
- Improved operator and environmental safety
- Certified to ASTM / RRES / NADCAP

SPECIFICATION COMPLIANCE

- ASTM E2297
- ASTM E3022
- ISO 3059
- RRES 90061

Fluorescent Penetrant Testing:

- ASME BPVC
- ASTM E165
- ASTM E1417
- ASTM F601
- ISO 3452
- NADCAP AC7114/1

Fluorescent Magnetic Particle Testing:

- ASME BPVC
- ASTM E709
- ASTM E1444
- ASTM E3024
- ISO 9934
- NADCAP AC7114/2

EV6000

PRODUCT PROPERTIES

Maximum Irradiance*	5,000 $\mu\text{W}/\text{cm}^2$
Peak Wavelength	365 ± 5 nm
Typical Beam Profile*	Circular spot, 2.3 cm diameter, $> 1,000 \mu\text{W}/\text{cm}^2$ UV-A intensity
Excitation Irradiance (347-382 nm)	$\geq 2,000 \mu\text{W}/\text{cm}^2$
Working Distances	
ASTM	Min. WD ≤ 13 cm
RRES 90061	Min. WD = 38 cm Max. WD = 92 cm
Typical Visible Emission	
ASTM range (400-760 nm)	≤ 2 ft-candles*
RRES 90061 range (390-800 nm)	≤ 20 lux at 38 cm (min. WD) ≤ 5 lux at 92 cm (max. WD)
Stabilisation Time (ambient conditions)	5 minutes
Lamp Cord Length	5.18 m
Power Supply Cord Length	2.75 m
Weight	0.9 kg
Power In	100-240 VAC / 50-60 Hz / < 1 A

USER RECOMMENDATIONS

NDT Method	Fluorescent Penetrant Testing and Fluorescent Magnetic Particle Inspection
Accessories	UVE-Lux Dual Function Meter (017B012) UV-absorbing spectacles (017G001)
Mounting bracket	Adjustable bracket for MAG bench (023A008) Adjustable bracket for table mounting (023A008B) Bracket mounting to the EV6000 (023A008M)

PART NUMBERS

626953	EV6000 lamp with power supply
626971	EV6000 lamp only
626952	Power supply only